10/680,089

TITLE OF THE INVENTION

A METHOD FOR MEASURING DISTANCE AND POSITION USING SPREAD SPECTRUM SIGNAL, AND AN EQUIPMENT USING THE METHOD

PS 2/2/05 This appln is a con of 10/166,090 on 11/03 Pat. 6,657,579 which is a con of 09/640,018 on 8/17/00 Pat 6,459,402

BACKGROUND OF THE INVENTION

The present invention relates to terminal equipment for measuring its own position, particularly to equipment for measuring distances and positions using the radio waves emitted from base stations fixed on the ground, including CDMA base stations.

The principles of distance measurement using a spread spectrum signal are described using Fig. 9. The station for transmitting the spread spectrum signal transmits this signal in send timing 400. The aforementioned receiving station receives the spread spectrum signal and obtains receive timing 401. Differential time 402 between receive timing 401 and send timing 400 is detected as the propagation time of the spread spectrum signal. The distance between the transmitting station and the receiving station can be calculated by multiplying differential time 402 by the velocity of light. Because of the principles described above, distance measurement using a spread spectrum signal requires the measurement of receive timing 401 at the receiving station.

Next, the principles of position measurement using a